



COMMUNITY DEVELOPMENT DEPARTMENT

CITY OF SANTA BARBARA SEA-LEVEL RISE ADAPTATION PLAN SUBCOMMITTEE

November 4, 2020

Agenda

A. Comments/edits to Draft Adaptation Plan

1. Modifications to guiding principles
2. Additions to near-term action list
3. Near-term actions of highest priority
4. Frequency of reevaluation of plan
5. Funding and prioritization of projects
6. Timing of largescale flood protection
7. Role of Subcommittee moving forward

Agenda

- B. Components of Subcommittee recommendation to Council (if time)
- C. Upcoming meetings
- D. Public Comment

COMMENTS/EDITS TO DRAFT ADAPTATION PLAN

Modification to Guiding Principles

- Adding principle advocating for minimization of impacts to disadvantaged groups (Subcommittee agreed 10/21)

Modification to Guiding Principles

- 2.c. “Minimize impacts of sea-level rise and related hazards to....c. Existing and future development...”
- Adding principles that emergency response and recovery coordination and greenhouse gas reductions are key aspects of SLR planning.
- Add to principle 5:“Encourage: ...d. Voluntary and proactive resilience actions through incentives such as streamlining permitting”

Changes to Near-Term Actions

- Add: Study the potential of raised groundwater levels to spread contamination in soils and groundwater.
- Add: Study the potential socioeconomic impacts and benefits of various adaptation actions

Changes to Near-Term Actions

- Change “consider changes to floodplain regulations” to “change floodplain regulations”
- Add “identify incentives for raising or otherwise modifying structures and development to be more resilient voluntarily” (e.g. permit streamlining etc.)
- Add study potential changes to creek setbacks

Highest Priority Near-Term Actions

- Shoreline Monitoring Program
- Raising Harbor breakwater and groins
- Redesign Laguna Tide Gate
- Relocate or flood proof wastewater infrastructure under beach
- Update Hazard Mitigation Plan
- Study optimization and expansion of sand management

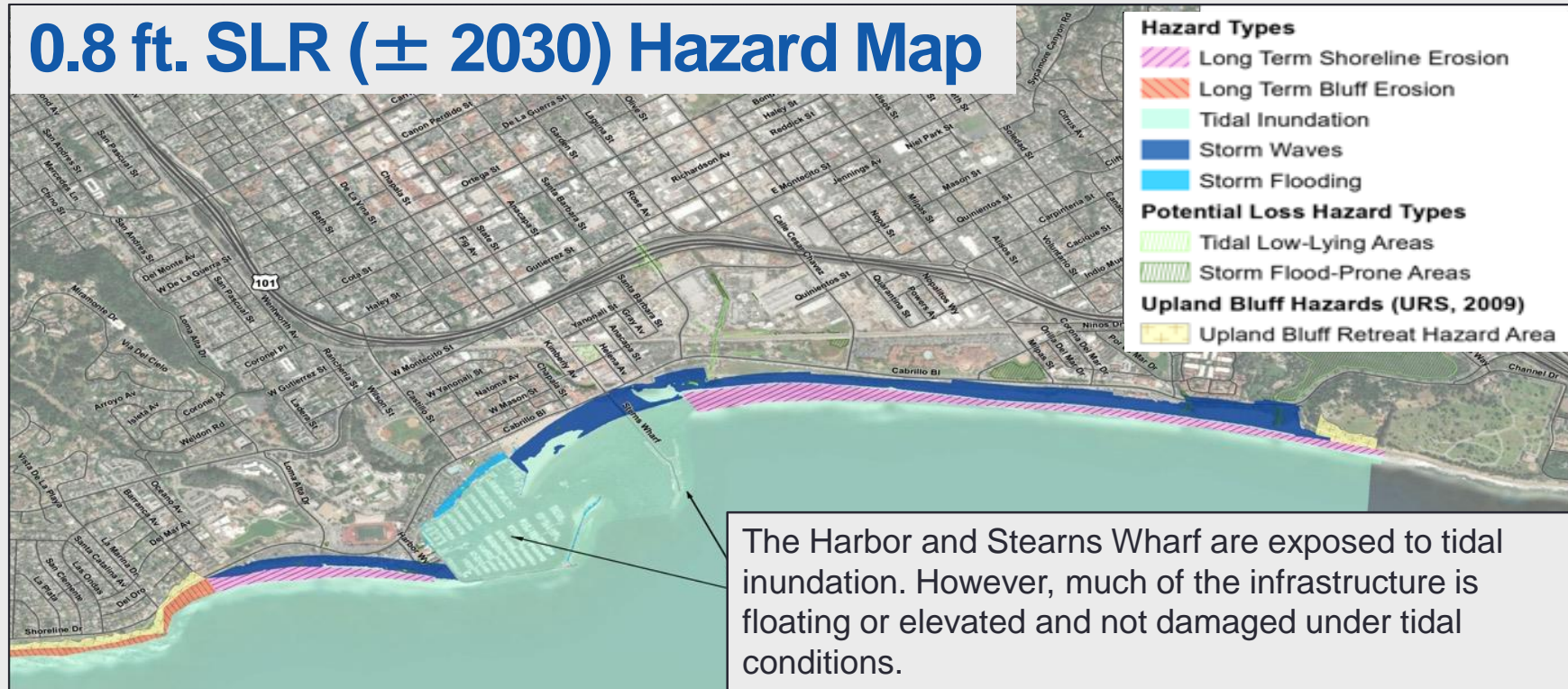
Reevaluation of Adaptation Plan

- Currently recommendation is to update the Adaptation Plan every 10 years
- Possible changes:
 - At least every 10 years or sooner if warranted due to significant new information
 - Every 5 years

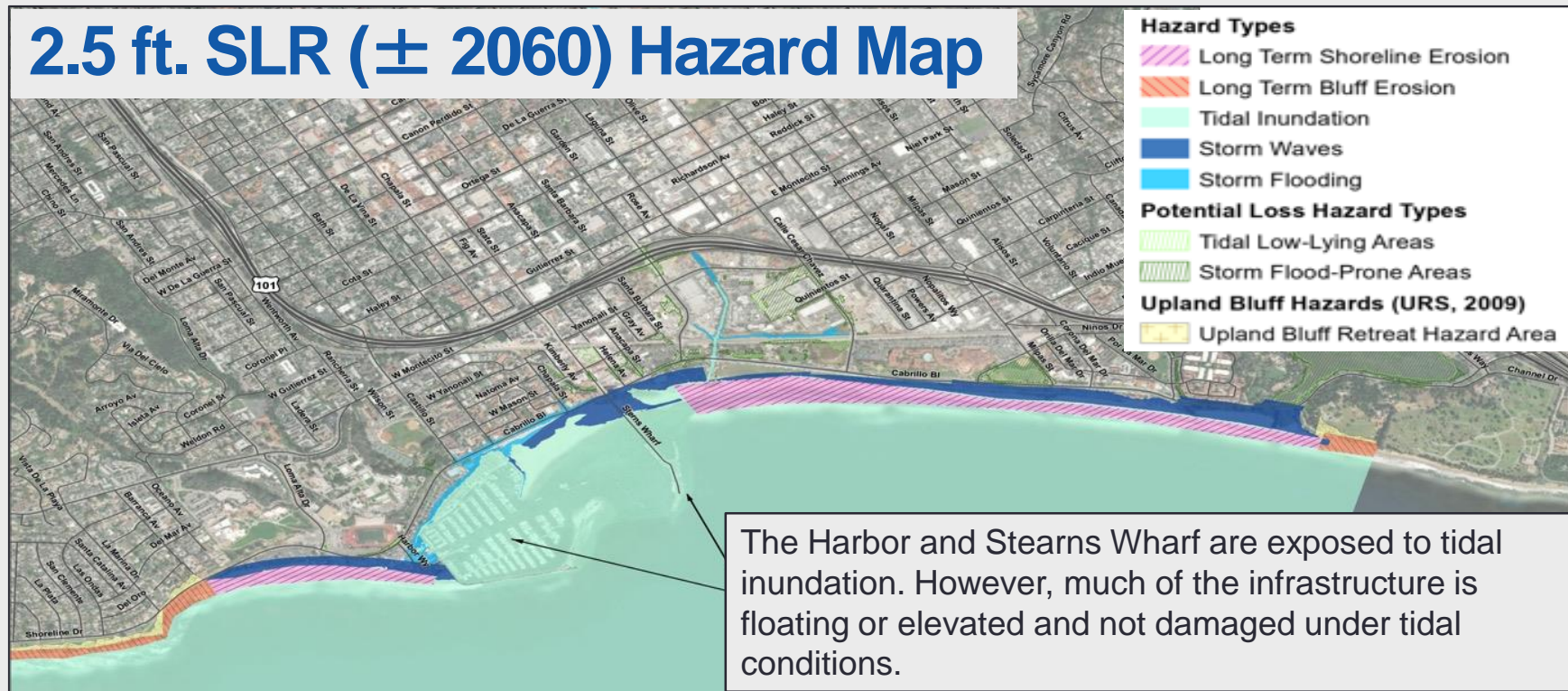
Funding and Prioritization of Projects

- How will the City go about identifying funding and prioritizing projects (who and how this will be done)?

0.8 ft. SLR (\pm 2030) Hazard Map



2.5 ft. SLR (\pm 2060) Hazard Map



6.6 ft. SLR (± 2100) Hazard Map

North of 101

- More frequent flooding
- Future coastal flooding in areas already flooded during heavy rains

South of 101

- Regular tidal inundation
- More frequent and severe coastal flooding
- Shoreline erosion

Hazard Types

- Long Term Shoreline Erosion
- Long Term Bluff Erosion
- Tidal Inundation
- Storm Waves
- Storm Flooding

Potential Loss Hazard Types

- Tidal Low-Lying Areas
- Storm Flood-Prone Areas
- Upland Bluff Hazards (URS, 2009)
- Upland Bluff Retreat Hazard Area

The Harbor and Stearns Wharf are exposed to tidal inundation. However, much of the infrastructure is floating or elevated and not damaged under tidal conditions.

Recap of Timing of Largescale Flood Protection

- Thresholds:
 - As reach 2 feet of sea-level rise assets closest to shore could be addressed case by case
 - Between 2-3 feet of sea-level rise beach nourishment and/or use of groins will not prevent large portions of Cabrillo Boulevard from being threatened by flooding and erosion

Recap of Timing of Largescale Flood Protection

- Thresholds:
 - Storm flooding:
 - *Goes North of Cabrillo at 3.3 feet slr*
 - *Goes North of Highway 101 at 5.7 feet slr*
 - Tidal inundation:
 - *Goes north of Cabrillo at 4.1 feet of slr*

Recap of Timing of Largescale Flood Protection

- Needed by 2.5 feet of slr:
 - Begin segments of seawalls/levees in most threatened areas
 - Begin segments of floodwalls up Mission, Laguna, Sycamore Creeks
 - Begin some stormwater pumping
 - Possible need for groundwater dewatering

Recap of Timing of Largescale Flood Protection

- Needed by 3-4 feet of slr (maybe sooner):
 - Completion of seawall/levees
 - Expansion of creek floodwalls
 - Groundwater dewatering
 - Stormwater pumping
- Planning and permitting: 1 to 1.5 feet slr

Recap of Timing of Largescale Flood Protection

- Studies needed in near-term:
 - Feasibility of seawall/levee system
 - Study of flood hazards associated interaction of fluvial flooding with sea-level rise
 - Feasibility and potential impacts of groundwater pumping
 - Case law

Role of Subcommittee Moving Forward

- Discuss

COMPONENTS OF SUBCOMMITTEE RECOMMENDATION

Potential Staff Recommended Council Actions

- Adoption of Adaptation Plan
- Direct staff to begin implementation of plan, including development of a 5-Year Implementation Plan.
- Initiation of LCP Amendment to update the Coastal LUP's Shoreline Hazards Screening Map and other policy edits to implement plan.

UPCOMING MEETINGS

Upcoming Meetings

- November 18th
 - Any follow-up from today
- December 2nd
 - Presentation on changes made to plan and any new information (socioeconomic)
 - Draft recommendation
- December 9th

PUBLIC COMMENT

Click “raise your hand” icon



to speak